

RECEIVED  
OCT 27 2003  
TECH CENTER 1600/2900

THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICANT : Jackowski et al.

INVENTION : **Glycoprotein and Apolipoprotein  
Biopolymer Markers Indicative of  
Alzheimers Disease**

SERIAL NUMBER : 09/993,344

FILING DATE : November 23, 2001

EXAMINER : Chernyshev, Olga N.

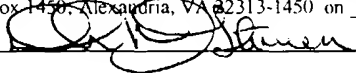
GROUP ART UNIT : 1646

OUR FILE NO. : 2132.096

-----

CERTIFICATE UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being  
deposited with the U.S. Postal Service as First Class mail  
in an envelope addressed to Commissioner for Patents  
P.O. Box 1450, Alexandria, VA 22313-1450 on 10-20-2003



Mail Stop: Non-Fee Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION UNDER 37 CFR § 1.132**

I, Dr. George Jackowski, do hereby declare as follows:

1. I am Chief Executive Officer and Chief Science Officer of Syn-x Pharma Inc., assignee in the application entitled **"Glycoprotein and Apolipoprotein Biopolymer Markers Indicative of Alzheimers Disease"**, having U.S. Application Serial No. 09/993,344, filed November 23, 2001.

2. In the Office Action mailed on July 18, 2003, claim 1 was rejected under 35 U.S.C. 101 and 35 U.S.C. 112, first paragraph because the claimed invention allegedly has no disclosed specific

and substantial utility (101) and thus contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention (112, first paragraph). The Examiner states that the invention is drawn to a biopolymer marker peptide consisting of amino acid residues 2-18 of SEQ ID NO:1 useful in the diagnosis of Alzheimers disease. The Examiner asserts that the experiments disclosed in the specification do not sufficiently support that the claimed peptide is a biopolymer marker of Alzheimers disease. The Examiner is particularly concerned with an alleged lack of controls in the experiments.

3. This declaration is submitted in order to clarify the use of controls in the experiments disclosed in the specification.

4. There are no conventional controls applied in the methods of the instant invention. Both samples from diseased patients and samples from healthy patients (age-matched) are separated by polyacrylamide gel electrophoresis. The gel is then examined in order to identify differences in the bands appearing in diseased and healthy patients (age-matched). The bands, which differ between healthy (age-matched) and diseased patients, are excised and purified from the gel. A determination of upregulation, downregulation, presence and/or absence of the proteins present in the bands is assessed by sample wherein they appear, for example, the claimed peptide fragment was identified and excised from a band which exhibited decreased expression in the diseased samples as

10/20/2003 MON 11:34 FAX 581 626 6572 MCHALE &amp; SLAVIN PA

0004/004

compared with the age-matched samples, thus this can be considered to be down-regulation of the protein in the disease sample as compared to the strong presence of the protein in the age-matched sample. This comparison between two physiological states as evidenced by the bands appearing on the gel represents an inherent control in the experiment. The claimed protein fragments excised from the bands are sequenced and identified through the application of mass spectrometric techniques. It is standard laboratory practice to sequence peptides by mass spectrometry and identify the peptides based upon known sequences available in databases; thus sequencing and comparison of control peptides is not required. One of ordinary skill in the art would be familiar with these standard protocols of mass spectrometry.

The undersigned declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the Application or any patent issuing thereon.

Oct 20 2003  
Date

George Mackowski  
George Mackowski

\\Fs2\DRV\_E\STAFF DATA FILES\Ferric Lander's Files\FE\AMENDMENT.PAT\2132\_096\_132.wpd